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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,342	10/22/2003	Kenji Ogasawara	16869Q-092900US	8540
20350 7590 02/09/2007 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			EXAMINER OLSON, JASON C	
			ART UNIT 2627	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/692,342

Applicant(s)

OGASAWARA ET AL.

Examiner

Jason C. Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

Claims 1-25 are objected to because of the following informalities: the use of a hyphen in “growth program” and in “hard disk drive” is not consistent throughout the claims.

Appropriate correction is required.

Claim 14 is objected to because of the following reasons: claim 14 is a duplicate claim of claim 13, whereas, both claim 13 and 14 are dependent from claim 12. Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 21-25 are drawn to a “program” *per se* as recited in the preamble and as such are non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable

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medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 12 and 16, the phrase "various kinds of" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "various kinds of"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 12 recites, "allowing", in line 7 of the claim, as a method step. The examiner is unable to ascertain the scope of the method because the term "allowing" does not distinctly define the step being claimed. The term "allowing" does not have practical application because it

is not positively recite the step. The examiner suggests that the applicant amend the term "allows" to "execute".

Claim 19 recites the limitation, "a hard disk drive manufacturing method" in the preamble. However, the steps listed in the claims are not directed to manufacturing or making of a hard drive, but rather to writing servo information onto a disk. The claim is considered indefinite.

Claim 20 recites the limitation "A hard-disk-drive manufacturing method" in the preamble. There is insufficient antecedent basis for this limitation in the claim. The examiner believes claim 20 should be dependent from claim 19 and will examine the claim as such. Furthermore, the steps of claim have nothing to do with making or manufacturing a hard disk drive. This renders the claim indefinite.

Claim 22 recites the limitation "A program" in the preamble. There is insufficient antecedent basis for this limitation in the claim. The examiner believes claim 22 should be dependent from claim 21 and will examine the claim as such.

Claim 23 recites the limitation "the read growth program " in line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests that the limitation be amended to recite, "the growth program read out".

Claim 24 recites the limitation "the another hard-disk-drive" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim. The examiner believes claim 24 should be dependent from claim 23 and will examine the claim as such.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 12-18, 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Oh et al. (U.S. Pat. 6,189,051), hereafter, "Oh".

Regarding claim 1, Oh teaches recognizing means used for recognizing that an optimization/inspection process to be performed on the hard disk device has not yet been completed (see col. 4, ln. 62-col. 5, ln. 1 and figure 5; the downloading portion 560 downloads needed programs in such that it recognizes that the hard drive is not complete, so it must download the needed programs to be complete); growth-program receiving means (see figure 5, downloading portion 560 is a receiving means), based on the recognition of the recognizing means, for receiving from a parent hard disk drive (see col. 4, ln. 34-38 and figure 5, computer 500 is a parent hard disk drive) connected to the hard disk drive (see figure 5, computer 550 is the hard disk drive) a growth program necessary for performing the optimization/inspection process on the hard disk drive itself (see col. 4, ln. 61-col. 5, ln. 1; the downloading portion receives the programs from the computer 500); and execution means, based on the growth program received by the growth-program receiving means, for executing the optimization/inspection process on the hard disk drive itself. (see col. 5, ln. 1-6 and figure 5, hard disk master generating portion 570 installs or executes).

Regarding claim 2, Oh teaches command transmitting means, based on the recognition of the recognizing means, for transmitting a command requesting the growth program to the parent hard disk drive (see col. 4, ln. 62-65; the hard disk drive logs into the parent hard disk drive to and downloads programs, which constitutes transmitting a command request). \

Regarding claim 3, Oh teaches storing means for storing in a memory the growth program executed by the execution means (see col. 4, ln. 1-3; the programs are stored into the hard disk drive, so it is inherent that there must be a memory); wherein, if the hard disk drive is thereafter connected to another hard disk drive in which the optimization/inspection process has not yet been completed, the growth program stored in the storing means is supplied to the another hard disk drive (see col. 4, ln. 3-8 and figure 2; the programs are supplied from drive 200 to new drives 220).

Regarding claim 4, Oh teaches the parent hard disk drive takes charge of a predetermined part of the optimization/inspection process to be executed by the execution means (see col. 5, ln. 16-24; the order in which the programs are installed is dictated by the parent hard disk drive).

Regarding claims 5-8: Claims 5-8 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above. Claims 5-8 however also recites the following limitations as taught by Oh: a ROM and a MPU (see col. 3, ln. 56-65 and figure 1; item 102 is ROM and item 100 is a CPU or MPU that are available in each of the hard disk drives).

Regarding claims 12-16 and 18: method claims 12-16 and 18 are drawn to the method of using the corresponding apparatus claimed in claims 1-4. Therefore method claims 12-16 and 18

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correspond to apparatus claims 1-4 and are rejected for the same reasons of anticipation as used above.

Regarding claim 17, Oh teaches the information used for optimization, which is supplied from the first hard disk drive, includes a test code possessed by the first hard disk drive (see col. 5, ln. 18-22; the script file is a test code).

Regarding claims 21-24: Regarding claim 21-24: program claim 21-24 are drawn to the functions of using the corresponding apparatus claimed in claims 1-4. Therefore program claims 21-24 correspond to apparatus claims 1-4 and are rejected for the same reasons of anticipation as used above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11, 19, 20, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh in view of Yatsu (U.S. Pat. 6,738,215).

Regarding claims 9-11, Oh teaches connection means adapted to be connected to an unfinished hard disk drive (see figure 5, computer 500 is connected to unfinished computer 550); storing means for storing a program (see col. 4, ln. 36-38 and figure 5; data base 510 is a storage means); and supplying means for supplying the unfinished hard disk drive with the program stored in the storing means (see col. 4, ln. 62-col. 5, ln. 1; different programs and files are



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supplied from the portions 520, 530, and 540 of the computer 500 to unfinished computer 550); receiving means for receiving a request command for the program from the unfinished hard disk drive; wherein the supplying means supplies the program on the basis of the request command received by the receiving means (see col. 4, ln. 61-5, ln. 1; computer 500 receives a request when computer 550 logs in and downloads programs, which are then supplied by computer 500 to computer 550); and the program includes a function of executing optimization/inspection processing (see col. 5, ln. 1-6; setting the environment is an optimization/inspection process), and the hard disk drive further includes execution means for executing part of the optimization/inspection processing on the unfinished hard disk drive (see col. 5, ln. 34-39; computer executes downloaded programs).

Oh fails to disclose unfinished servo information in a drive and storing a program by which the unfinished hard disk drive writes servo information to itself. However, Yatsu is relied upon to teach an unfinished drive (see col. 7, ln. 39-41; reference patterns are recorded on the disk but the disk is unfinished), storing a program by which the unfinished drive writes servo information to itself (see col. 7, ln. 27-29) and executing the program to self-servo write (see col. 7, ln. 49-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon programs that are transferred to an unfinished drive of Oh by applying the teaching of transferring a self-servo writing program to an unfinished drive as taught by Yatsu for the purpose of increasing accuracy of the write positions and timing of servo patterns and to reduce disk manufacturing costs as suggested by Yatsu in column 3, line 58-63.

Regarding claims 19 and 20: method claims 19 and 20 are drawn to the method of using the corresponding apparatus claimed in claims 9-11. Therefore method claims 19 and 20

correspond to apparatus claims 9-11 and are rejected for the same reasons of obviousness as used above.

Regarding claim 25: program claim 25 is drawn to the functions of using the corresponding apparatus claimed in claims 9-11. Therefore program claim 25 corresponds to apparatus claims 9-11 and is rejected for the same reasons of obviousness as used above.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C. Olson whose telephone number is (571)272-7560. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571)272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JCO



**TAN DINH  
PRIMARY EXAMINER**

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